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U. S. DEPARTMENT OF AGRICULTURE.

FARMERS' BULLETIN 385.

BOYS' AND GIRLS'
AGRICULTURAL CLUBS.

BY

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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS,
Washington, D. C., November 4, 1909.

SIR: I have the honor to transmit herewith a paper prepared under the direction of D. J. Crosby, Specialist in Agricultural Education of this Office, on Boys' and Girls' Agricultural Clubs in the United States. The interest in this form of school extension work in agriculture is so widespread, and the calls are so frequent for information concerning its history, plans, and recent development, that I recommend the publication of this manuscript as a Farmers' Bulletin.

Respectfully,

A. C. TRUE,
Director.

HON. JAMES WILSON,
Secretary of Agriculture.

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BOYS' AND GIRLS' AGRICULTURAL CLUBS.

INTRODUCTION.

There have been few developments in recent years of greater educational interest and significance than the work done by associations of boys and girls in agricultural and domestic-art undertakings. As a rule, these have had their beginning in some form of competitive contest for special occasions or awards. The organization of clubs has usually been an incidental outgrowth of the plans for these contests, and the name applied to the organization itself has varied widely with the different purposes carried forward. Thus we find clubs for corn growing, cotton growing, potato growing, fruit growing, poultry growing, live-stock study, bird study, home culture, and high-school improvement. All of these have been more or less agricultural in their general character.

To any who are unacquainted with the nature of such clubs it may be explained that a corn-growing club is an association of boys who enter into a competition to determine which can grow the most or the best corn on a certain area of ground under definite rules of planting, cultivation, and exhibit of their product. A cotton-growing club would undertake a similar competition in producing the best yield of cotton under prescribed conditions. For girls these contests have frequently taken the form of bread-making, sewing, or joint contests with boys in gardening or poultry raising.

The results already apparent from such competitive and cooperative work may be summarized as follows:

(1) Individually the members of such clubs have been led to observe more closely, to recognize good and bad qualities in the products they have grown, and in the insects, fungi, and other various conditions affecting their work; they have met and learned to solve some problems in the improvement of plants, fruits, animals, and housework; they have learned that improvement in one direction is not always, or even usually, accompanied by improvement in all directions; they have learned something of the value of labor, the cost of production, and the keeping of simple accounts with different farm and household affairs; they have been encouraged to read good literature and have learned some of the sources of good agricultural literature; their views have been broadened by contact with others

and by visiting institutions of learning, highly developed farms, and other places of interest; and, finally, the power of taking the initiative has in many cases been strongly developed in them as individual and responsible members of the community.

(2) Collectively they have learned the value of organized effort, of cooperation, and of compromise; and the social instinct has been developed in them—a matter of great importance in rural districts, where the isolated condition of the people has long been a great hindrance to progress.

(3) The influence upon the communities at large, the parents as well as the children, has been wholesome. Beginning with an awakening interest in one thing—better seed corn, for example—communities have rapidly extended their interest to other features of rural improvement, with the result that in the regions affected by

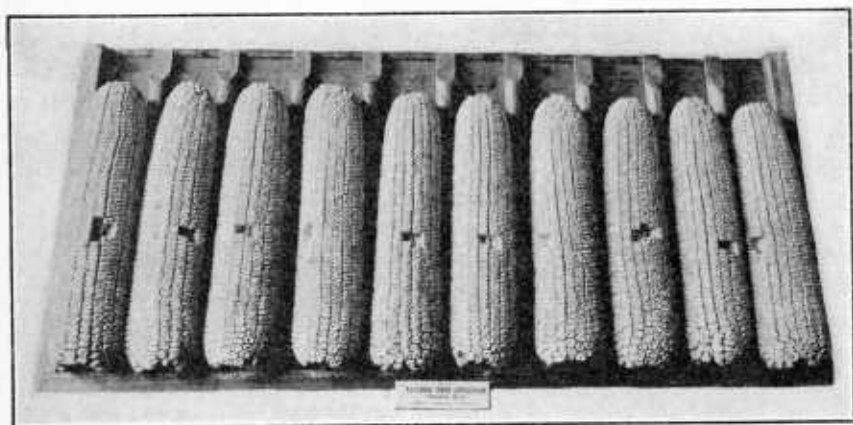


FIG. 1.—Ten best ears of corn. Exhibited by L. B. Clore, of Indiana, at the Second International Corn Exposition. These ears won the grand sweepstakes prize of \$1,000.

the agricultural-club movement there has come about a general upward trend in the thoughts and activities of the people. The possibilities in corn improvement are well illustrated in figure 1.

(4) These club activities have in many instances exercised a very stimulating, if not a "redirecting," influence upon the ordinary work of rural schools and teachers.

(5) The knowledge gained from the work of these clubs has demonstrated that the natural love of competition among boys and girls (as well as their elders) can be utilized to immense advantage in furthering their own education for efficiency.

Setting aside the question whether boys' and girls' agricultural clubs may eventually be superseded by more permanent organic developments in general public education, they have at least an undoubted value at the present time and seem to be an important, if

not necessary, link in the evolution toward a more efficient educational system. Experience with them has gone far enough to furnish well-tested plans for States and sections that are now ready to take up this work.

Various agencies have taken the initiative in starting this movement under particular local conditions, but the inspiration for state-wide activity in these lines has generally come from some individual or official source connected with the state department of education, the state agricultural college, or the United States Department of Agriculture. In the absence of such initiative the work has sometimes begun in the zeal and wisdom of some county officer or association, as the county superintendent of schools, the farmers' institute society, the county fair association, or teachers' association, the grange organization, or the Young Men's Christian Association. Experience has shown that the work has always been most permanent and productive when it has resulted in a definite local organization, preferably under the leadership of the county school superintendent.

HOW THE WORK HAS BEEN DONE IN CERTAIN STATES.

The best evidence of the value of this type of school extension interest may perhaps be seen in a more particular reference to the actual club work of boys and girls already successfully carried on in several States. The first state-wide movement of this kind began about 1898, in New York, under the auspices of the College of Agriculture of Cornell University, as a development from its nature-study lessons. This work has now gone over the whole State and has taken a variety of forms, such as corn-growing, potato-growing, fruit-growing, poultry-raising, and garden contests, with special prizes to girls for the best work in sewing and bread making. It has all been directed more or less closely by the Junior Naturalist Monthly, and more recently by the Cornell Rural School Leaflet, which frequently gives definite lessons in agriculture written by the college specialists. This publication reaches about 7,000 teachers and school commissioners during nine months of the year and is the official organ of the Cornell Farm Boys' and Girls' Clubs, which now have an aggregate membership of about 75,000. The prize-winning exhibits in the local school and county contests are taken to the state exhibit held each year at the College of Agriculture during "Farmers' week." At the meeting in the spring of 1909 there were nearly 450 ten-ear exhibits of corn at this "Corn show," about one-third of which came from 28 boys' and girls' clubs (fig. 2). There were also exhibited about 150 drawings on corn subjects, 150 essays on "How to grow corn," and 200 letters on "How we celebrated corn day in our school."

Nebraska is another State in which this kind of club work has been very thoroughly organized, beginning in 1905, under the leadership

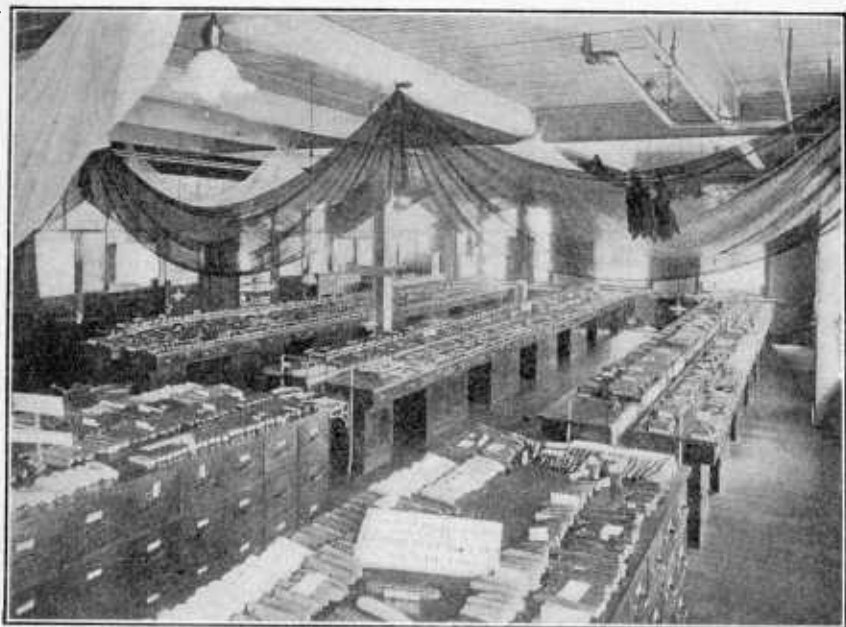


FIG. 2.—New York State Corn Show. Exhibit shown during "Farmers' week," 1909.

of the state superintendent of public instruction in cooperation with the Agricultural College of the State University, at Lincoln. Practically every county is now included in the plans. The boys grow



FIG. 3.—Exhibit of the Boys' Experimental Club of Nemaha County, Nebr.

tically every county is now included in the plans. The boys grow their show corn and vegetables under directions sent out from the

state headquarters and the girls practice baking in accordance with recipes sent out to the schools from the domestic science department of the State University. Early in the fall a local contest is held in each school, the three prize-winning exhibits and the best three essays being then taken to a township show, then to a county exhibit (fig. 3), and finally to the state corn-growing and corn-cooking contest at Lincoln (fig. 4). This meeting includes a grand "corn banquet" which gathers from 2,000 to 3,000 boys and girls from over the State.

Similar work in Ohio, under the direction of the agricultural extension department of the State University, has reached practically all the rural boys and girls in the schools of the State. In Illinois this work began under the initiative of certain county superintendents of

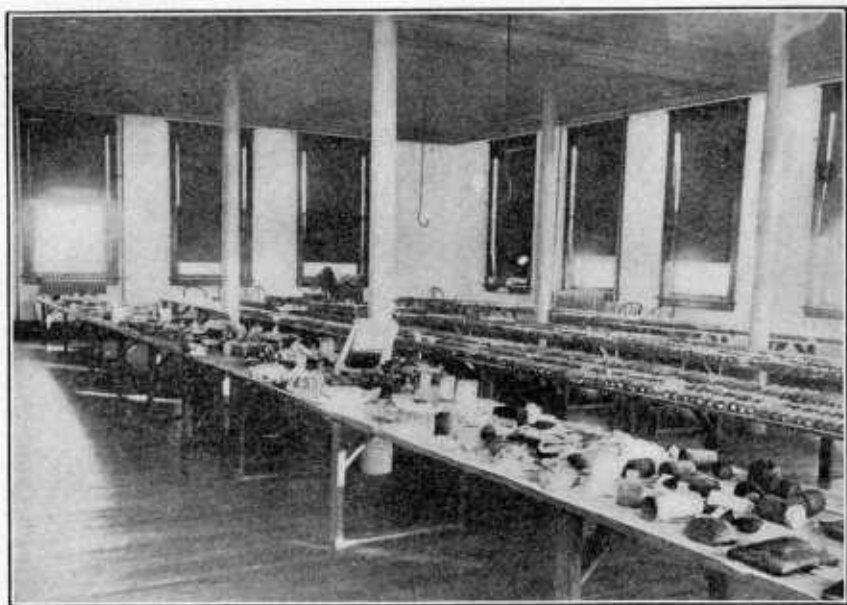


FIG. 4.—State corn-growing and corn-cooking exhibit at Lincoln, Nebr., 1905. Raw material in the background, baked products on front tables.

schools and in connection with the farmers' institutes. The organizing work of the Winnebago County superintendent of schools has probably had the widest publicity. Here was introduced the feature of annual excursions of the club members and their parents to neighboring experiment fields (fig. 5) and to state agricultural colleges. Club interest is also utilized in improving the school grounds and buildings of the county. One session of the county farmers' institute is set apart for the club work, and agricultural specialists from other States as well as their own have been engaged to address these sessions. Under similar county initiative this work was started in Iowa by the superintendent of Keokuk County (fig. 6), and the super-

intendent of Page County (fig. 7). Club work for both boys and girls (fig. 8) has also been successfully established in Berks County, Pa., by the superintendent.

Among the Southern States, Texas and Georgia have been prominent in organizing this kind of work. The "Farmer Boys' and Girls' League" in the former State was organized in 1903 in connection with the Texas Farmers' Congress, and now numbers over 1,750 members (fig. 9). In Georgia this work has been directed by the State University, and the interest has been chiefly in corn and cotton growing and in the improvement of live stock. Much of the development in the Gulf and South Atlantic States has been assisted by this Department in connection with the boys' demonstration work directed by the former state superintendent of education in South Carolina.



FIG. 5.—A committee of the Winnebago County (Ill.) Agricultural Club inspecting corn experiments on one of the state experiment fields.

ASSISTANCE GIVEN BY THE DEPARTMENT OF AGRICULTURE.

The Department, through the Office of Experiment Stations, has frequently given assistance in furthering the organization of this line of school extension work. It has sent out bulletins of information to those engaged in competitive contests and in some cases has secured the sending of seed from sources outside the State. Where the club work has been in operation for some time this Office, in cooperation with the Bureau of Plant Industry, has begun in an experimental way to develop the interest of members in testing some of the new fruits and vegetables introduced from other countries. In

this way the Sakurajima winter radish from Japan is being grown this year by some of the Michigan boys' corn clubs.

By means of illustrated stereopticon lectures the Office of Experiment Stations has also assisted local organizers and club members in understanding what has been accomplished by junior clubs in other States and sections of this country. In 1904 it issued a Year-book reprint on "Boys' Agricultural Clubs," which gave a survey of the agricultural club movement so far as it had then developed.

The purpose of the present bulletin is to give further information and suggestion to state and county superintendents and rural teachers who desire to keep abreast with the advancing development of this interesting and valuable form of school work. Such school-



FIG. 6.—A Keokuk County (Iowa) school exhibit.

extension work furnishes an effective means of reaching, holding, and directing the interest and energies of boys and girls who are without as well as within the schools, and so promotes the betterment of the social, educational, and economic conditions affecting country life.

THE RELATION OF CLUB WORK TO RURAL EDUCATION.

The organization and work of these various clubs has in many cases assumed the character of school "extension work" in agricultural education. As such it is directly contributory to the field of agricultural education in general; but in many instances it has acquired a very intimate relation to the regular work of the public elementary

and secondary schools. Thus in Ohio the state superintendent of agricultural extension work writes that most of the boys' and girls' club activities are now conducted as a part of the school work and that "agricultural clubs as such are coming to be things of the past,"



FIG. 7.—A Page County (Iowa) club worker.

so that no separate records or statistics of such work are now generally kept in that State.

The exhibits of what has been accomplished by these clubs are frequently the most attractive features of local and state fairs, and have perhaps done more than any other single influence to inspire the interest of the people in the usefulness of the instruction given in the common schools. The influence of such work upon the developing ideals of the proper function of the schools and their relation to the coming type of country-life education is well shown in the prizes offered in a recent western state fair:

These prizes range from \$2 to \$25 for exhibits of work teaching girls household service and home appreciation; of work in applied civics and school service to the community; evidence of cooperative neighborhood work for school building and ground improvement; children's garden work, with plans, photographs, and descriptions; arithmetic applied to industrial and business affairs of the school, home, and community; "field work" in geography; class record of weather observations for three months or more; plan of farm (drawn, modeled, or constructed), showing buildings, irrigation system, crop rotation, etc.; construction work done by any pupil, showing mechanical and inventive ability, and best single exhibit of courses of study, plans, etc., showing ways of making school instruction more valuable and connecting it more intimately and vitally with community life.

SUGGESTIONS FOR THE ORGANIZATION AND WORK OF JUNIOR AGRICULTURAL CLUBS.

There are obvious advantages in merging agricultural club work closely with the interests of the public school and the home life of the pupils. The county superintendent of schools is in a position to utilize such community interest to the greatest benefit in vitalizing and unifying the enthusiasm of teacher, pupil, and parent. He can explain the plans of work to his teachers, and they in turn to pupils and parents, thus securing the clear understanding and cordial cooperation of all concerned.



FIG. 8.—Berks County (Pa.) Domestic Science Club, showing button badges bearing the motto: "Better Housekeeping." (Prizes awarded at county teachers' meeting.)

There is need of a concrete object of effort in all such associated activity, and the local corn-growing, bread-making, or fruit-raising contest furnishes such an object. This object should be varied from year to year, or at least new lines of effort should be joined to it, in order to maintain a live and growing interest. The organization under which the work is done should be simple but definite. Responsibilities should be real and clearly placed. Orderliness is

essential to impartiality and harmony. But the anatomy of the organization should be not conspicuous; the "average boy" does not derive much enjoyment from riding a horse of pronounced gothic structure, even in the cornfield.

The year's experiment or contest should be planned carefully, definitely, and early. Appropriate prizes and trophies should be provided. Reports of contestants should be received at intervals during the season, on blanks or suggestions previously given out. Letters of direction and encouragement should be sent at critical times from the local headquarters. Circulars, bulletins, and other means of instruction are to be supplied, and should always include



FIG. 9.—Grayson County (Tex.) Corn Club, showing uniform hats and badges.

the publications of the state agricultural college, the state experiment station, and the United States Department of Agriculture, in reference to the subject in hand. One of the chief values in this work is the training it gives in finding and using information that has already been published. State-wide cooperation with other clubs and with the agricultural college and experiment station should be secured, and if possible with the state superintendent of public instruction and the state fair association.

Occasional lectures and demonstrations should be made at county meetings of members, which may sometimes be held with advantage in connection with the county teachers' and farmers' institutes (see

fig. 8, p. 13). As early as practicable the organization should develop plans for an annual district school exhibit of competing agricultural and domestic-art products, followed by township, county, and state exhibits, the latter in connection with the state fair or the meeting of the state teachers' association. A distinctive badge or button (see figs. 8 and 9, pp. 13 and 14) worn by the boy and girl members of the clubs adds much to the feeling of community interest and dignity.

THE FIRST MEETING.

The first meeting for organization should include as many boys and girls of the county as can be brought together in the most convenient place. This meeting should be called by the county superintendent (or commissioner) of schools and should be thoroughly advertised in the county schools and papers. If possible it should be held while the schools are still in session, before the spring vacation; and it should announce a definite object. The following is suggested:

NOTICE.

The boys and girls in the schools of ——— County, and any others between the ages of 12 and 18 years who wish to join them, are cordially invited to meet in the high school building in ———, on Saturday, ———, 19—, at — o'clock.

The object of this meeting is to organize for the purpose of engaging in a county corn-growing and bread-baking contest this year. Each contestant will be supplied with seed, if necessary, and with complete directions for doing the work. An illustrated talk will be given by ———. Some fine prizes for the best work, amounting to \$——, have been offered by ———. If you want to get acquainted with other boys and girls in the county and enter into a lively and happy competition with them for these prizes, don't fail to be present at the time appointed. Bring your teacher with you and as many parents as wish to come. If you come by rail, buy a "party ticket" so as to get the best rate. *Don't come too late.*

Yours, for better corn and bread,

County Superintendent of Schools.

The prizes offered in such contests can usually be arranged for by cooperation with the county grange, farmers' institute society, teachers' association, bankers, leading merchants, and various local associations. The prizes may take the form of money, trophy cups, or banners, cultivating tools or planters, bread-making sets, bicycles, suits of clothes, "due bills" for merchandise, etc.

Near the close of the meeting, which should not be too long, a simple form of constitution should be ratified. It should have been previously agreed upon by the members of the "advisory committee." Usually it will require no discussion and can be adopted by a rising vote. If time is limited the regular officers of the club may be elected at a later meeting; but there is decided advantage in placing responsibility of this kind upon the boys and girls themselves and developing familiarity with good parliamentary practice. The following general form of organization has been found satisfactory.

CONSTITUTION.

ARTICLE I. Name of club.

ARTICLE II. Objects of club.

ARTICLE III. Membership (including badge or button, and a provision for honorary members, if desired).

ARTICLE IV. Officers. (A president, one vice-president from each school district, a secretary-treasurer, and an advisory committee consisting of the county superintendent, the lecturer of the county grange, and the president of the county farmers' club or institute society.)

ARTICLE V. Duties of members. (As prescribed in the rules for contests.)

ARTICLE VI. Duties of officers. (Defined as usual in such organizations.)

Section —. The advisory committee shall arrange for all public contests and exhibits, the procuring and awarding of prizes, the sending of letters and circulars of information, the general county meetings of the club, and the reporting of statistics and other information to the state organizer.

ARTICLE VII. Subsidiary clubs.

Each local school having — club members within its district may organize as a local club with its own officers, badge, local prizes, etc. Its advisory committee shall consist of the district school board and teachers, and its president shall be one of the vice-presidents of the county club.

When the constitution has been adopted membership should be determined by the collection of signed blanks, previously distributed, showing data as given in the following form:

ENROLLMENT RECORD.

Date —, 19—.

I wish to join the — County — Club, and hereby promise to follow all the rules of membership and contests.

(Signed) —.

Age at nearest birthday —. Date of birth —, 19—.

Township —.

School district —.

Teacher —.

My post-office address —. Box number —. R. F. D. No. —.

The members of a corn-growing club usually keep a careful record of all work done in connection with the annual contest. It is advantageous to supply the basis for this in the form of a little memorandum book which covers the following items and may well include the club constitution and list of officers:

HOW THE CROP WAS GROWN.

1. Grown by —, school district —.
2. Post-office address —.
3. Area of plat in square rods —. (Not less than — acre.)
4. Kind of soil (loam, sand, clay) —.
5. Kind of crop grown on it the year before —.
6. Kind of crop grown on it the second year before —.
7. Kind and amount of fertilizer used —.
8. Cost or value of fertilizer —.
9. Date of plowing —. Hours required, self —, horse —.^a

^a If two horses are used, count as twice the time of one horse.

10. Depth of plowing (in inches) ———.
11. Additional preparation of the ground:
- (a) How many times disked —, when ———.
- (b) How many times harrowed —, when ———.

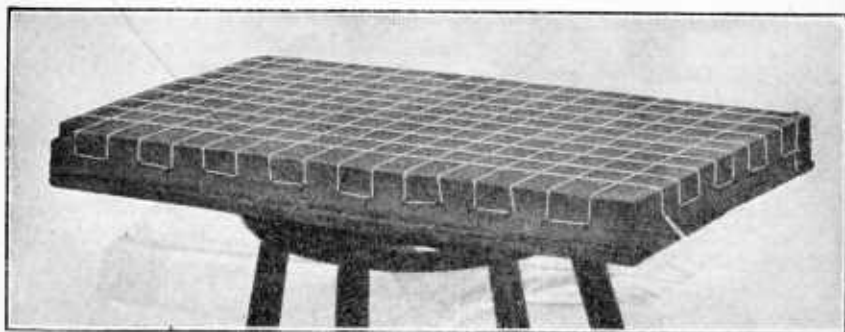


FIG. 10.—Sand-tray seed-corn germinator, ready for planting. Five or six kernels from one ear planted in each square marked off by the string laced over the tray. The tray is sawed from a soap box and filled with sand.

- (c) How otherwise prepared ———.
- (d) Total hours work of preparation, self ———, horse ———.^a
12. Kind of corn planted ———. Variety name ———.
13. Seed procured from ———.

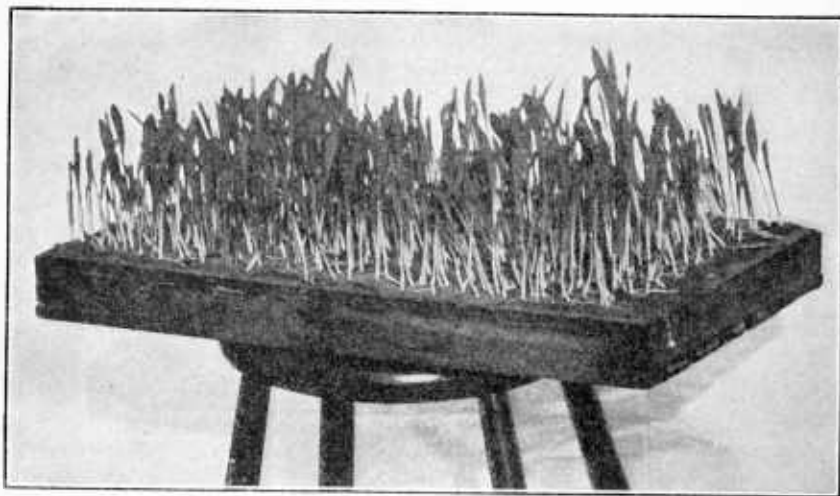


FIG. 11.—Sand-tray seed-corn germinator, with plants about ten days old. Test developed far enough to determine ears fit for seed.

14. Quantity of shelled corn used for seed ———.
15. Number of ears tested ———. Number of kernels from each ———.
16. Method of testing ^b ———.

^a If two horses are used, count as twice the time of one horse.

^b Note figures 10 and 11.

17. Number of ears which proved satisfactory ———.
18. Number of hills planted ———; date ———, 19—.
19. Date when first hills came up ———.
20. Number of hills failing to come up ———; why ———.
21. Date of each cultivation and implement used ———.
22. Total hours cultivation; self ———, horse ———.^a
23. Date of hoeing crop ———, 19—. Hours work ———.
24. Number of stalks with two ears ———.
25. Number with no ears ———.
26. Number of hills with three stalks ———; two ———; one ———.
27. Date of first tassels appearing ———, 19—; ears ———, 19—.
28. Date of any frosts on the crop ———, 19—.
29. Date of cutting and shocking ———, 19—.
30. Date of husking ———, 19—.
31. Date of selecting ears for exhibit ———, 19—.
32. Number of ears first selected ———; weight in pounds ———.
33. Care of selected ears after husking ———.
34. Weight of ten ears at time of exhibit ———.
35. Was the selecting done without any other person present? ———.
36. Was all the work of production done by the contestant (except plowing, weighing, and hauling the crop)? *b* ———.
37. Total number of hours worked ———.
38. Total number of hours horse ^a worked ———.
39. Value of own work at ———^c cents per hour, \$ ———.
40. Value of horse's ^a work at ———^c cents per hour, \$ ———.
41. Value of ground rent for crop at ———^c per acre, \$ ———.
42. Value of fertilizers used, \$ ———.
43. Value of salable crop at ———^c cents per bushel, \$ ———. (Weigh good ears when drawn from field, and count 70 pounds to the bushel.)
44. Profit on the season's work, \$ ———.

In addition to the foregoing record, which should accompany the exhibit offered by the contestant, an essay covering the same facts in a connected description is often required. This and the calculations required in the report furnish a helpful means of connecting field work with school work. It is usual to announce at the time of the first meeting the special rules that govern the contests. These may be conveniently summarized in the following form:

RULES FOR CONTESTANTS.

1. Each contestant is allowed to make only one exhibit entry each year.
2. Each contestant must be regularly enrolled in the county club before beginning work.
3. Each contestant must be under ——— years of age.
4. Each contestant for corn prizes must prepare his ground, test seed, plant, cultivate, cut, and husk crop, all without assistance from any other person. (He may have assistance in plowing, fertilizing, and hauling crop, and should have in weighing it.)

^a If two horses are used, count as twice the time of one horse.

^b Draw line through "plowing" and "hauling" if contestant did that alone.

^c Should be uniform rate agreed upon for the whole State.

5. Each contestant must study the score card and the bulletins recommended by the state organizer.

6. Each contestant on essays shall write not more than ——— words, and all must carefully fill the blanks on "How the crop was grown."

7. Each contestant's record and essay must be indorsed, with his exhibit, by his district teacher as evidence of her confidence that it is all the product of his own work.

8. All exhibits are to be the property of ——— ——— ^a at the end of the exhibit.

Corn growing and bread making or sewing are the most convenient objects of effort in starting this kind of work. Rules for the girls' contests should be obtained from the domestic art department of the agricultural college or other state institution admitting girls. Other forms of contest may be started the second year if desired.

AVAILABLE PUBLICATIONS.

Most of the bulletins and circulars included in the following lists, with the exception of the Farmers' Bulletins, were prepared more or less directly with reference to junior club work and study. A few others have been given because of their general relation to some phase of the work described in the foregoing pages. In many cases these will suggest new lines of club work that may be entered upon at a later time. The list could easily be made much longer, but care has been taken to include no publication for which a price is charged.

In sending for copies of these publications care should be used to designate exactly by title, number, and volume or series. None of these is supplied by the Department of Agriculture except the Farmers' Bulletins and others specially designated as publications of the Office of Experiment Stations. As a rule, bulletins issued by some State other than that in which the applicant resides can not be had in quantity, but may often be had in numbers sufficient to supply the members of the advisory committee mentioned on page 16.

GENERAL, ON CORN.

The Nebraska Corn Book, Department of Public Instruction, Lincoln, Nebr.

Studies of Corn and Its Uses, Illinois Agricultural College Extension Bulletin, Urbana, Ill.

Corn Study, South Dakota Agricultural College Bulletin, Vol. II, No. 2.

Corn Growing, Farmers' Bulletin 199, U. S. Department of Agriculture.

The Production of Good Seed Corn, Farmers' Bulletin 229, U. S. Department of Agriculture.

Corn Culture in the South, Farmers' Bulletin 81, U. S. Department of Agriculture.

Food Value of Corn and Corn Products, Farmers' Bulletin 298, U. S. Department of Agriculture.

SEED-CORN SELECTION.

Bulletin 116, Agricultural Experiment Station, Kingston, R. I.

Bulletin 122, Agricultural Experiment Station, Lexington, Ky.

^a They are sometimes sold at auction when the expenses of the meeting are not otherwise met.

Agricultural College Extension Bulletin 1, Vol. II, Columbus, Ohio.

Agricultural and Mechanical College Bulletin 2, Teachers' Series, Stillwater, Okla.

Farmers' Bulletins 229 and 253, U. S. Department of Agriculture.

SEED-CORN TESTING.

Special Bulletin 47, Agricultural Experiment Station, East Lansing, Mich. (See figures 10 and 11 for illustrations—taken from this bulletin—of a simple sand-tray method of testing seed corn.)

Agricultural College Extension Bulletin 7, Vol. II, Columbus, Ohio.

Agricultural and Mechanical College Bulletin 2, Teachers' Series, Stillwater, Okla.

Farmers' Bulletins 229 and 253, U. S. Department of Agriculture.

TIME AND METHODS OF PLANTING.

Bulletins 55, 65, Agricultural Experiment Station, Experiment, Ga.

Bulletin 147, Agricultural Experiment Station, Manhattan, Kans.

Bulletin 104, Agricultural Experiment Station, Clemson College, S. C.

Bulletin 134, Agricultural Experiment Station, Auburn, Ala.

See also the general bulletins in first list.

FERTILIZERS AND HOW TO APPLY THEM.

Farmers' Bulletins 44, 192, U. S. Department of Agriculture.

CULTIVATION.

See first list.

CORN HARVESTING METHODS AND MACHINERY.

Farmers' Bulletins 303, 313, U. S. Department of Agriculture.

CORN PLAT MEMORANDUM BOOK.

G. I. Christie, Lafayette, Ind. ^a

CORN JUDGING.

See first list and state score card.

USES OF CORN FOR LIVE STOCK.

Bulletin 102, Agricultural Experiment Station, Urbana, Ill.

Farmers' Bulletins 22 and 32, U. S. Department of Agriculture.

USES OF CORN FOR FOOD.

Farmers' Bulletins 249, 298, U. S. Department of Agriculture.

BREAD-MAKING CONTESTS AND RECIPES.

Nebraska Corn Book, Department of Public Instruction, Lincoln, Nebr.

Agricultural College Extension Bulletin 10, Vol. IV, Columbus, Ohio.

Farmers' Bulletin 112, U. S. Department of Agriculture.

MILK AND BUTTER TESTS AT HOME.

Farmers' Bulletins 63, 131, 241, U. S. Department of Agriculture.

Agricultural College Extension Bulletin 4, Vol. I, Columbus, Ohio.

Agricultural College Extension Dairy Lessons, 1, 2, 3, 4, etc., University of Illinois, Urbana, Ill.

Testing Milk on the Farm (Form 10), University of Illinois, Urbana, Ill.

^a Not the printer, but the designer of this memorandum book, which contains most of the items in the record shown on pages 16-18. A sample copy can probably be obtained by sending postage to him.

COTTON GROWING AND JUDGING.

Bulletins 6, 98, University of Georgia, Athens, Ga.

Farmers' Bulletins 217, 285, and 302, U. S. Department of Agriculture.

POTATO GROWING.

Farmers' Bulletin 35, U. S. Department of Agriculture.

STRAWBERRIES.

Farmers' Bulletin 198, U. S. Department of Agriculture.

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Agricultural College Extension Bulletin 9, Vol. II, and Bulletin 2, Vol. V, Columbus, Ohio (and official score card and rules).

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Bulletin 98, University of Georgia, Athens, Ga.

POULTRY RAISING.

Agricultural College Extension Bulletins 1, 2, 3, etc., Corvallis, Oreg.

Bulletin 98, University of Georgia, Athens, Ga.

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Farmers' Bulletin 54, U. S. Department of Agriculture.

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Circular of Information No. 6, Bureau of Education, Washington, D. C.

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Agriculture Leaflets, Department of Public Instruction, Lincoln, Nebr.

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Tree Planting, Farmers' Bulletin 134, U. S. Department of Agriculture.

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How to Run Farm Machinery (Form 15), Easy Illustrated Lessons in the Care and Repair of Plows, Mowers, Binders, and Gasoline Engines; How to Mix and Use Concrete, Lay Tile, and Splice Ropes; University of Illinois, Urbana, Ill.

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PLANS FOR JUNIOR AGRICULTURAL CLUBS.

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Ohio University Bulletin 22, Series 7, Columbus, Ohio.

The Winnebagoes, 1903, County Superintendent O. J. Kern, Rockford, Ill.

The Country School and the Country Child, County Superintendent O. J. Kern, Rockford, Ill.

Nebraska Boys' and Girls' Associations, University Bulletin, Lincoln, Nebr.

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Boys' Agricultural Club Bulletin, County Superintendent Jessie Field, Clarinda, Iowa. Bulletin 98, University of Georgia, Athens, Ga.

Mississippi School Boys' Experiment Club, Agricultural College, Miss.

Bulletin 1, Vol. 7, Agricultural and Mechanical College, Stillwater, Okla.

The Grout Farm Encampment, University of Illinois, Urbana, Ill.

Vocational Possibilities in Country Schools, County Superintendent E. M. Rapp, Reading, Pa.

Developing the American Farm Boy, University of Illinois, Urbana, Ill.

Statistics of junior agricultural clubs thus far reported.

State.	No. of coun- ties.	Coun- ties organ- ized.	Approx- imate mem- ber- ship.	Under the auspices of—	Objects.
Alabama.....	67	6	390	Commissioner of Agriculture, Agricultural College, U. S. Department of Agriculture.	Corn.
Arkansas.....	77	50	3,000	Superintendent of public instruction, Agricultural College, U. S. Department of Agriculture.	Corn.
Delaware.....	3	1	(a)	State Corn Growers' Association.	Corn.
Florida.....	45	1	20	Mrs. Kirk Monroe.....	Birds.
Georgia.....	137	9	b 350	Agricultural College, U. S. Department of Agriculture.	Corn, cotton, live stock.
Illinois.....	102	2	b 1,100	County superintendents, College of Agriculture.	Corn, bread making.
Indiana.....	92	45	b 5,000	Superintendents of agricultural extension and farmers' institutes.	Corn, wheat, potatoes, bread, sewing.
Iowa.....	98	(a)	4,400	County superintendents, Agricultural College.	Corn, potatoes, flowers, sewing, cooking.
Kentucky.....	119	10	(a)	Commissioner of Agriculture...	Corn.
Louisiana.....	59	14	1,140	Superintendent of Agricultural Schools, U. S. Department of Agriculture.	Corn.
Maine.....	16	(a)	c 600	College of Agriculture, state superintendent of public instruction.	Gardening, school improvement.
Massachusetts.....	14	(a)	630	Agricultural College, North Adams State Normal School.	Corn, potatoes, garden- ing.

a Not reported.

b Many others compete who are not club members.

c The membership of the "School Improvement League" includes all public schools.

Statistics of junior agricultural clubs thus far reported—Continued.

State.	No. of counties.	Counties organized.	Approximate membership.	Under the auspices of—	Objects.
Michigan	83	6	1,500	Michigan Corn Growers' Association, U. S. Department of Agriculture.	Corn.
Minnesota	84	28	(a b)	College of Agriculture, Department of Public Instruction.	Corn.
Mississippi	76	30	6,000	Commissioner of Agriculture, U. S. Department of Agriculture.	Corn, cotton, home culture.
Nebraska	91	59	25,000	College of Agriculture, superintendent of public instruction.	Corn, sewing, cooking.
New York	61	(a)	75,000	State College of Agriculture....	Corn, potatoes, fruit, poultry, domestic art.
North Carolina	95	9	350	U. S. Department of Agriculture.	Corn.
North Dakota	45	20	5,000	State Agricultural College.....	Corn, potatoes, strawberries.
Ohio	88	(a)	5,000	Extension department, State University.	Corn, domestic art.
Oklahoma	75	40	2,030	State Agricultural College, U. S. Department of Agriculture.	Corn, cotton, wheat domestic art.
Oregon	33	(a)	100	State Agricultural College.....	Poultry.
Pennsylvania	67	1	2,000	County Superintendent E. M. Rapp.	Corn, bread making.
South Carolina	41	7	300	Commissioner of Agriculture, state superintendent of education, U. S. Department of Agriculture.	Corn.
Tennessee	96	4	800	Public school teachers.....	Corn experiments, school improvement.
Texas	232	41	b 1,760	Texas Farmers' Congress, U. S. Department of Agriculture.	Corn.
Virginia	100	11	2,500	State superintendent, U. S. Department of Agriculture.	Corn, domestic art.
Washington	36	1	200	State Agricultural College.....	Wheat, potatoes, school grounds.
Total	2,132	395	144,170		

^a Not reported.^b Many others compete who are not club members.

The foregoing statistics of the junior agricultural club movement were secured by correspondence with agricultural college men who have been instrumental in forwarding the movement, with state superintendents of public instruction, and with county superintendents of schools and others. While the figures show that a large number of boys and girls are organized into such clubs, it is almost certain that the number is much larger than is shown in the table. This conclusion is drawn from the fact that in some States where such work has been carried on for several years practically no figures indicating the extent of the movement could be secured. The table is therefore intended more as an indication of the nature and scope of the movement than as a complete record of its status at the present time.

